

paper and computer readable copies of the Sequence Listing adds no new matter. The 3.5" diskette contains an IBM compatible dos-text file of the sequence listing named "00450seq.txt." Consideration and entry of this Statement and attachments are respectfully requested.

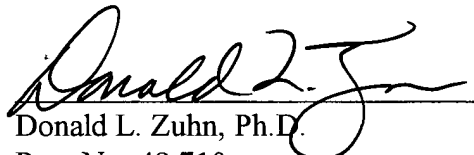
CONCLUSIONS

Applicants respectfully contend that in view of the above amendments and remarks, Applicants' reply filed September 25, 2002 is now fully responsive to the Office Action mailed June 4, 2002.

If Examiner Rawlings believes it to be helpful, he is invited to contact the undersigned representative by telephone at (312) 913-0001.

Respectfully submitted,
McDonnell Boehnen Hulbert & Berghoff

Dated: January 28, 2003

By: 
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Reg. No. 48,710

AMENDMENTS TO THE CLAIMS

Marked Up Versions of Amended Claims under 37 C.F.R. 1.121(c)(1)(ii)

3. (Amended Four Times) An isolated nucleic acid molecule comprising:

(a) a nucleotide sequence encoding a polypeptide comprising the amino acid sequence:

Met Arg Leu Leu Xaa Leu Ser Xaa Leu Xaa Xaa Xaa Leu Xaa Leu Cys Xaa Xaa
Xaa Xaa Ser Xaa Glu Gly Xaa Xaa Xaa Pro Ala Lys Xaa Xaa Xaa Xaa Arg Xaa
Xaa Xaa Xaa Xaa Cys His Xaa Xaa Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Gly
Xaa His Xaa Arg Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Trp
Val Val Pro Gly Ala Leu Pro Gln Xaa (SEQ ID NO: 22),

wherein the residue at position 12 may be either methionine or isoleucine;

the residue at position 18 may be either cysteine or serine;

the residue at position 19 may be either isoleucine or valine;

the residue at position 22 may be either serine or threonine;

the residue at any of positions 25, 26, 61, or 64 may be either arginine or lysine;

the residue at position 27 may be either histidine or arginine;

the residue at position 51 may be either threonine or asparagine;

the residue at position 55 may be either asparagine or histidine;

the residue at position 81 may be either isoleucine or valine;

the residue at any of positions 5, 8, 10, 11, 14, 17, 20, 31, 32, 33, 34, 36, 40, 43, 44, 46, 47, 48, 49, 50, 52, 57, 59, 62, 66, 67, 68, 69, 70, or 71 may be any naturally occurring amino acid; and

the residue at any of positions 37, 38, 39, or 65 may be any naturally occurring amino acid or may be absent; or

(b) a nucleotide sequence complementary to the nucleotide sequence of (a).

PENDING CLAIMS

Clean Versions of Pending Claims under 37 C.F.R. 1.121(c)(3)

1. An isolated nucleic acid molecule comprising a nucleotide sequence:
 - (a) as set forth in SEQ ID NO: 4;
 - (b) of the DNA insert in ATCC Deposit No. PTA-1755;
 - (c) encoding a polypeptide as set forth in SEQ ID NO: 5; or
 - (d) complementary to the nucleotide sequence of any of (a) - (c).

2. An isolated nucleic acid molecule comprising a region of the nucleotide sequence of:
 - (a) SEQ ID NO: 4, or
 - (b) the DNA insert in ATCC Deposit No. PTA-1755;encoding a polypeptide fragment of at least about 25 amino acid residues, but not more than 80 amino acid residues, wherein upon injection into an animal the polypeptide fragment produces an antibody that binds to the polypeptide as set forth in SEQ ID NO: 5.

3. An isolated nucleic acid molecule comprising:
 - (a) a nucleotide sequence encoding a polypeptide comprising the amino acid sequence:
Met Arg Leu Leu Xaa Leu Ser Xaa Leu Xaa Xaa Xaa Leu Xaa Leu Cys Xaa Xaa
Xaa Xaa Ser Xaa Glu Gly Xaa Xaa Xaa Pro Ala Lys Xaa Xaa Xaa Xaa Arg Xaa
Xaa Xaa Xaa Xaa Cys His Xaa Xaa Pro Xaa Xaa Xaa Xaa Xaa Xaa Xaa Lys Gly
Xaa His Xaa Arg Xaa Cys Xaa Xaa Cys Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Trp
Val Val Pro Gly Ala Leu Pro Gln Xaa (SEQ ID NO: 22),
wherein the residue at position 12 may be either methionine or isoleucine;
the residue at position 18 may be either cysteine or serine;
the residue at position 19 may be either isoleucine or valine;
the residue at position 22 may be either serine or threonine;
the residue at any of positions 25, 26, 61, or 64 may be either arginine or lysine;
the residue at position 27 may be either histidine or arginine;

the residue at position 51 may be either threonine or asparagine;
the residue at position 55 may be either asparagine or histidine;
the residue at position 81 may be either isoleucine or valine;
the residue at any of positions 5, 8, 10, 11, 14, 17, 20, 31, 32, 33, 34, 36, 40, 43, 44, 46, 47, 48, 49, 50, 52, 57, 59, 62, 66, 67, 68, 69, 70, or 71 may be any naturally occurring amino acid; and

the residue at any of positions 37, 38, 39, or 65 may be any naturally occurring amino acid or may be absent; or

(b) a nucleotide sequence complementary to the nucleotide sequence of (a).

4. A vector comprising the nucleic acid molecule of Claims 1, 2, or 3.
5. A host cell comprising the vector of Claim 4.
6. The host cell of Claim 5 that is a eukaryotic cell.
7. The host cell of Claim 5 that is a prokaryotic cell.
8. A process of producing a polypeptide comprising the step of culturing the host cell of Claim 5 under suitable conditions to express the polypeptide encoded by said nucleic acid molecule, and optionally isolating the polypeptide from the culture, thereby producing the polypeptide.